Abstract

Axial piston compressor, especially a compressor for the air-conditioning system of a motor vehicle, having a housing and, for drawing in and compressing a coolant, a compressor unit arranged in the housing and driven by means of a drive shaft (104), the compressor unit comprising pistons moving axially back and forth in a cylinder block and comprising a swash plate (107) which drives the pistons and rotates together with the drive shaft. For a predetermined mass of the swash plate (107) moved in rotation on the one hand and/or a particular mass moved in translation on the other hand, the mean radius governed by the geometry and/or by the density distribution and/or the mean height of the swash plate (107) or of the pivotal portion thereof is/are so selected that the centrifugal forces occurring on rotation of the swash plate (107) are sufficient to counteract the pivotal movement of the swash plate (107) to provide deliberate regulation and thereby to influence, especially to reduce or to limit, the piston stroke and, consequently, the quantity delivered.

(Fig. 3)